

PhD-day "EERA JP6 Energy Storage: "Technoeconomics and Sustainability"**Call for Abstracts****Prospective sustainability assessment of energy storage technologies - methods and case studies*****7th of December 2026, 9:00 am – 2:15 pm CET (Online)***

The Sub-program 6: Techno-economics and sustainability of energy storage technologies of the EERA Joint Programme Energy Storage (JP ES) offers PhD students the possibility to present and discuss their work to their peers within the extended EERA JP ES network.

Scope of the PhD Days:

The future energy grid must be flexible enough to integrate higher shares of solar and wind generation, making sustainable energy storage essential for the clean energy transition. However, no 'silver bullet' has been identified so far, but rather a mix and hybridization of various stationary storage technologies (electrochemical, mechanical, chemical, thermal, and electrical storage) emerges as the most effective way to provide the required flexibility. In line with the latter, the use of adequate scheduling models (e.g., sub-hourly resolution) is key to accurately capture power system's flexibility through the efficient use of energy storage technologies. Their individual success depends on often hardly predictable future technical advances, actor preferences, development of competing technologies and designs, future cost efficiencies and environmental performance as well as the evolution of market demand and design.

Therefore, all those aspects lead to an increasing need to prospectively identify, exploit and exhaust possibilities to design and/or select emerging or evolving technology alternatives considering all sustainability dimensions. This can be done e.g., via Life Cycle Assessment (LCA), techno-economic methods, optimization and qualitative approaches in the combination of prospective methods like scenario analyses, learning curves, extrapolation, etc.

Within this context, the present PhD day aims to stimulate exchange and discussions about approaches, tools, research needs and your experiences regarding the following (non-exclusive) topics:

- Prospective Life Cycle Assessment of energy storage technologies and materials.
- Prospective techno-economics of energy storage technologies and materials.
- Hybridization of energy storage technologies.
- Multi-dimensional or multi-criteria assessments of energy storage technologies.
- System integration aspects for energy storage technologies in the European energy system.
- Operational decision-making of energy storage systems based on optimization methods and/or smart operation rules.
- Innovative business models based on smart operation strategies.

Thus, the PhD days offer you the opportunity to present your PhD project and receive feedback from other PhD students as well as from senior scientists from the same research environment. Furthermore, the best contribution will receive an official EERA award and funding for an open access publication.

Participation / registration:

The event is open to everybody interested in the field of energy storage. Only a registration is required to attend the event as listener.

Submission process and participation conditions:

Candidates have to be PhD students working in the field of energy storage and related techno-economics or sustainability analyses (in the broader field of named topics). Furthermore, their hosting institution must be a member of EERA Joint program Energy Storage.

Abstracts should be submitted no later than the **31st of October 2026** and not include more than 300 words. Please send your abstract to roland.hischier@empa.ch

Review, acceptance and award process:

It is only possible to include in total six presentations for the PhD day. All submissions will thus be evaluated by a selected scientific board consisting of Roland Hischier (EMPA), Daniel Fernandez-Muñoz (UPM), Urte Brand (DLR).

The best contribution presented at the PhD days will receive an official EERA award together with a scholarship grant of 2'000 EUR. All presentations can be made available on the EERA JP ES website.

Presentation format:

The PhD days will be carried out online in the form of a webinar.

The presentation should not take longer than 20 min + 10 min discussion.

A detailed agenda will be provided as soon as possible.

Contact and Organization:

[Henning Wigger](#), DLR-VE

[Roland Hischier](#), EMPA

[Manuel Baumann](#), KIT-ITAS

[Daniel Fernández Muñoz](#), UPM